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EXAMINER	
MEW, KEVIN D	

ART UNIT	PAPER NUMBER
2664	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/680,829	O'CONNELL ET AL.	
	Examiner	Art Unit	
	Kevin Mew	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *54* is/are allowed.

6)☒ Claim(s) *1-13,18-20,27-31,33-37,40-42 and 44-53* is/are rejected.

7)☒ Claim(s) *14-17,21-26,32,38,39 and 43* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Final Action

Response to Amendment

1. Applicant's arguments/remarks filed on August 19, 2004 regarding claims 1, 12, 13, 37 and 54 have been fully considered. Claim 54 is newly added and claims 1-54 are currently pending.

2. Acknowledgement is made of the location of the missing reference numeral 52 in the specification cited in the objection to the drawings of the previous Office Action. The objection to the drawings is now withdrawn.

3. Acknowledgement is made of the amended claims 12, 16, 39, 47, 50 in regards to the deficiencies cited in the claim objections of the previous Office Action. The corrections are acceptable and the claim objections regarding these deficiencies are now withdrawn.

4. Acknowledgment is made of the amended claims 6, 18-20, 30, 40-42, 46-49, 53 in regards to the deficiencies cited in the rejections under 35 U.S.C. 112, second paragraph. The corrections are acceptable and the rejections under 35 U.S.C. 112, second paragraph are now withdrawn.

Claim Objections

5. Claims 1, 34, 50 are objected to because of the following informalities:

In line 4, claim 1, replace "a user" with "an user."

In line 5, claim 1, replace "sessions" with "session."

In line 4, claim 34, replace "a user" with " an user."

In lines 3 and 5, claim 50, replace "a user" with " an user."

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4, 7-11, 27-31, 33-36, 44-47, 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al. (USP 6,363,053) in view of Scott et al. (USP 6,480,898).

Regarding claims 1 & 34, Schuster discloses a computer software and hardware product to perform a method of monitoring quality of service (collecting quality of service information from network traffic, see lines 21-22, col. 3, lines 38-44, col. 11 and abstract) in communications over a packet-based network between two points (transmitting traffic from a source to a destination over a plurality of network nodes over a packet based network, see lines 21-30, col. 3

and Fig. 3), at least one of which is an endpoint (destination, see line 25, col. 3), comprising the steps of:

transmitting test packets across the network (transmitting test traffic from a source to a destination, see lines 24-25, col. 3) and monitoring transmission characteristics of said test packets (monitoring characteristics of the test traffic transmitted by the source and characteristics of the test traffic received by the destination, see lines 21-30, col. 3);

dynamically calculating from said transmission characteristics a measure of network performance (identifying quality of service information by comparing characteristics of the test traffic transmitted by the source and characteristics of the test traffic received by the destination, see lines 21-30, col. 3); and

providing at said endpoint a dynamic indication of the network performance based on said calculation (comparing measured quality of service characteristics with the specified quality of service characteristics, thereby determining conformance to the service level agreement, see lines 5-9, col. 4).

Schuster does not explicitly show said endpoint is a telecommunication device enabling a user to participate in a telecommunication session over the network and the telecommunication device transmits test packets across the network while a telecommunication session including said telecommunication device is in progress.

However, Scott discloses a carrier exchange network, which comprises a gateway server acting as the originating gateway for routing VoIP calls placed by subscribers to the terminating gateway. Scott further discloses the gateway server comprises an carrier exchange CX agent (note that CX agent is a software component executing on a PC workstation) to enable real-time

measurements of quality of service QoS by collecting quality data when an actual VoIP call is being originated or terminated using actual packets. This teaches that the actual VoIP packets, which corresponds to the test packets, are transmitted across the network while an VoIP call involving the originating gateway server (transmitting test packets across the network while a telecommunication session including said telecommunication device is in progress, see col. 7, lines 22-45 and col. 8, lines 1-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the QoS measuring method of Schuster with the teaching of Scott in utilizing the actual VoIP call packets as the test packets to be collected at the CX agent of the originating gateway server such that actual VoIP test packets are transmitted across the network while a VoIP call session in progress is involving the originating gateway server and collecting QoS measurements at the CX agent of this gateway server. The motivation to do so is to enable real-time measurements of quality of service QoS in a more accurate way by measuring the actual VoIP call packets as the test packets transmitted across the network.

Regarding claims 2 & 35, Schuster discloses a computer software and hardware product to perform the method according to claims 1 and 34, respectively, wherein said transmission characteristics are selected from packet loss, transmission delay, and a combination thereof (QoS characteristics may consist of measurable attributes such as packet loss and latency, see lines 4-7, col.10).

Regarding claim 3, Schuster discloses a method according to claim 2, wherein said transmission characteristics include both packet loss and transmission delay (see lines 18-23, col. 12).

Regarding claim 4, Schuster discloses a method according to claim 1, wherein the indication of the network performance is provided by means of a visual display associated with the endpoint (see lines 5-8, col. 15).

Regarding claim 7, Schuster discloses a method according to claim 1, wherein said test packets include a first series of test packets which issue from a source location to a destination location (transmitting test traffic from a source port to an echo port, see lines 33-34, col. 3) and a second series of test packets which issue from said destination location to said source location in response to said first series of test packets (the echo port then transmits echo traffic back to the source port, wherein the echo traffic corresponds to the test traffic, see lines 35-38, col. 3), whereby said network characteristics may be monitored by comparing the first and second series of test packets (identifies quality of service information by comparing characteristics of the test traffic to characteristics of the echo traffic, see lines 38-41, col. 3).

Regarding claim 8, Schuster discloses a method according to claim 7, wherein the first series of test packets include local source timestamp information and wherein the second series of test packets include local destination timestamp information, the difference between said local source timestamp information and local destination timestamp information being used to calculate a delay characteristic of the network (a timestamp may be used to accurately record the

time of transmission and receipt if a packet transmission count is taken at the source and a packet count is taken at the source if the traffic is returned from an echo port, lines 29-37, col. 11).

Regarding claim 9, Schuster discloses a method according to claim 8, wherein the delay characteristic is the absolute delay in echo-free connections (Ta) between the source and destination locations over the network (test traffic is transmitted by a source to the unused port, see lines 36-64, col. 10).

Regarding claim 10, Schuster discloses a method according to claim 7, wherein a measure of packet loss is obtained by comparing the packets issued from the source location and the packets received back at the source location (packet loss can be measured by the number of packets received to the number of packets originally transmitted, see lines 18-20, col. 12 and 62-65, col. 13).

Regarding claim 11, Schuster discloses a method according to claim 9, wherein a measure of packet loss is obtained by comparing the packets issued from the source location and the packets received back at the source location (packet loss can be measured by the number of packets received to the number of packets originally transmitted, see lines 18-20, col. 12 and 62-65, col. 13).

Regarding claims 27 & 44, Schuster discloses computer software and hardware product to perform a method according to claims 1 & 34, respectively, wherein the step of providing a

dynamic indication of the network performance includes providing, at the request of a user, an indication of one or more of said transmission characteristics (comparing measured quality of service characteristics with the specified quality of service characteristics, thereby determining conformance to the service level agreement, see lines 5-9, col. 4 and lines 38-44, col. 11).

Regarding claim 28, Schuster discloses a method according to claim 27, wherein the request of the user is made by means of an input device associated with the endpoint and the indication is provided by means of a display device associated with the endpoint (see lines 1-8, col. 15 and lines 38-44, col. 11).

Regarding claims 29 & 45, Schuster discloses a computer software with instructions to execute a method according to claims 1 and 34, respectively, further comprising the step of logging the network transmission characteristics (collecting QoS characteristics, see lines 41-45, col. 9 and lines 38-44, col. 11).

Regarding claims 30 & 46, Schuster discloses a computer software with instructions to execute the method according to claims 1 & 34, respectively, further comprising the step of logging the results of said calculation (a report is generated to indicate a percentage by which an observed and identified QoS characteristic deviated from the QoS characteristic as specified in the SLA, see lines 30-38, col. 9, 23-26, 33-35, col. 10 and lines 38-44, col. 11).

Regarding claim 31, Schuster discloses a method according to claim 30, wherein the step of logging the results of said calculation occurs only when said results are within a predetermined range (periods of non-compliance may be cumulatively measured, see lines 32-41, col. 12).

Regarding claims 33 & 47, Schuster discloses a method according to claims 1 & 34, respectively, further comprising the step of adjusting a billing record for a user in dependence on the results of said calculation (see lines 37-41, col. 12 and lines 38-44, col. 11).

Regarding claim 36, Schuster discloses a computer software and hardware product according to claim 35, wherein the transmission characteristics include the absolute delay in echo-free connections (Ta) between source and destination locations over the network (test traffic is transmitted by a source to the unused port, see lines 36-64, col. 10 and lines 38-44, col. 11 and abstract), obtained by comparing local timestamp information from source and destination locations on the network (a timestamp may be used to accurately record the time of transmission and receipt if a packet transmission count is taken at the source and a packet count is taken at the source if the traffic is returned from an echo port, lines 29-37, col. 11) and a measure of packet loss obtained by comparing the packets issued from the source location and the packets received back at the source location (packet loss can be measured by the number of packets received to the number of packets originally transmitted, see lines 18-20, col. 12 and 62-65, col. 13).

Regarding claim 50, Schuster discloses a system for monitoring quality of service in communications over a packet-based network (an apparatus for collecting quality of service information from network traffic over a packet-based network, see lines 22-30, col. 3 and 38-44, col. 11 and abstract), comprising:

a source endpoint connected to the network via which a user may transmit communication signals over the network (a general purpose computer, connected to the network, transmits an IP header from a first network device, see lines 10-17, col. 4);

a test packet generator for transmitting test packets across the network a test packet receiver for receiving test packets from the network (the set of instructions cause the general purpose computer to transmit a first IP packet from a first network device to a second network device, see lines 14-17, col. 4);

a processor for measuring transmission characteristics of said test packets and for calculating from said transmission characteristics a measure of network performance (a comparator compares the measured quality of service characteristics with the specified quality service characteristics to determine conformance to the service level agreement, see lines 5-9, col. 4); and an output device associated with said endpoint for providing a dynamic indication of the network performance based on said calculation (the general purpose computer to perform the additional step of generating a report to indicate a level of conformance by a network administrative entity to a service level agreement, see lines 29-34, col. 4).

Schuster does not explicitly show said endpoint is a telecommunication device enabling a user to participate in a telecommunication session over the network.

However, Scott discloses a carrier exchange network, which comprises a gateway server acting as the originating gateway for routing VoIP calls placed by subscribers to the terminating gateway. Scott further discloses the gateway server comprises an carrier exchange CX agent (note that CX agent is a software component executing on a PC workstation) to enable real-time measurements of quality of service QoS by collecting quality data when an actual VoIP call is being originated or terminated using actual packets. This teaches that the originating gateway is a telecommunication device enabling an user to participate in a VoIP call session over the network (see col. 7, lines 22-45 and col. 8, lines 1-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the QoS measuring method of Schuster with the teaching of Scott in utilizing the originating CX gateway server as the telecommunication device that enables an user to participate in a telecommunication session over the network. The motivation to do so is to enable real-time measurements of quality of service QoS in a more accurate way by measuring the actual VoIP call packets as the test packets transmitted across the network.

Regarding claim 51, Schuster discloses a system according to claim 50, wherein said test packet generator includes a timestamp generator for adding a local source timestamp to said test packets (see lines 29-44, col. 11).

Regarding claim 52, Schuster discloses a system according to claim 51, further comprising a destination endpoint with which said source endpoint is in communication over the network (see lines 29-38, col. 11), said destination endpoint having associated therewith: a test

packet receiver for receiving test packets from the network (an echo or unused port for returning test traffic to the source, see lines 29-38, col. 9); a timestamp generator for adding a local destination timestamp to said received test packets (see lines 29-44, col. 11); and

a test packet re-transmitter for re-transmitting said received test packets with said local destination timestamp back to their source (an echo or unused port for returning test traffic to the source, see lines 29-38, col. 9).

Regarding claim 53, Schuster discloses a system according to claim 52, further comprising a centralised time server in communication with the network for generating a standardised time and providing same to said source and destination endpoints (see lines 29-37, col. 11).

7. **Claims 5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster in view of Scott, and in further view of Vaid et al. (USP 6,520,131).

Regarding claims 5 & 6, Schuster discloses all the aspects of the claimed invention set forth in the rejection of claims, except fails to disclose the indication of the network performance is provided by means of an audio signal and a discrete signal emitted at the source endpoint when the value of the transmission characteristic passes a predetermined value.

However, Vaid discloses a method and apparatus for monitoring QoS in which alarms will be triggered when a QoS characteristic threshold is reached (see lines 23-55, col. 27 and Fig. 19).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine the QoS monitoring apparatus of Schuster with the alarm portion of the GUI interface of QoS management tool of Vaid such that an aural signal will be generated to alert a transmission threshold is reached such as the QoS management tool taught by Vaid. The motivation to do so is to provide an audible signal to signify that the threshold of a certain transmission characteristic has been reached because it will provide an instant alert to bring attention to the network administrator on what transmission characteristic creates a bottleneck on the network performance.

8. **Claims 12-13, 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster in view of Scott, and in further view of Brueckheimer et al. (US Publication 2002/0087370).

Regarding claims 12-13, 37, Schuster discloses all the aspects of the claimed invention set forth in the rejection of claims, except fails to disclose the measure of packet loss and the identity of a communications codec being employed by the endpoint are used to calculate an equipment impairment factor (Ie) and the calculation of Ie is made by looking up the measured packet loss in a stored table which correlates values of Te with packet loss values for the codec being used.

However, Brueckheimer discloses a planning tool for determining the performance of a communications packet network (see abstract) in which its E-model utilizes an Equipment Impairment factor, determined subjectively for each codec and for each % packet loss, to calculate the transmission rating factor (see all lines in paragraphs 0174 and 0178).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine the QoS monitoring apparatus of Schuster with the network planning tool of Brueckheimer such that the equipment impairment factor, determined subjectively for each codec and for each % packet loss, is used in modeling the transmission rating factor such as the equipment impairment factor taught by Brueckheimer. The motivation to do so is to provide a more accurate assessment would be achieved by incorporating the compression and decompression impairment and packet loss in the calculation of the equipment impairment factor because delay and packet loss is introduced and voice quality is affected by the use of compression and decompression.

9. **Claims 48-49** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster in in view of Brueckheimer, and in further view of Scott et al.

Regarding claims 48-49, Schuster discloses all the aspects of the claimed invention set forth in the rejection of claims, except fails to disclose a telephone handset is used for displaying a dynamic indication of network performance based on the transmission characteristics of test packets transmitted across a network to which the handset is attached and for calculating a measure of network performance based on the transmission characteristics of test packets transmitted by the handset across the network.

However, Brueckheimer discloses a general purpose computer or a combination of hardware and software can be used to display a dynamical indication of QoS characteristics based on the test traffic received at the destination node (see lines 10-33, col. 4 and lines 38-44, col. 11) and a comparator is used for comparing the measured quality of service characteristics

with the specified quality of service characteristics to determine conformance to the service level agreement.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine the QoS monitoring apparatus of Schuster such that a telephone handset that comprises a general purpose computer for displaying a dynamic indication of network performance based on the transmission characteristics of test packets transmitted across a network and for calculating a measure of network performance based on the transmission characteristics of test packets transmitted by the handset across the network such as the general purpose computer taught by Brueckheimer. The motivation to do so is to provide a smaller device instead of the PC based station (note that a PC can comprise a internet phone and the software and hardware required to collect QoS information) disclosed in Schuster (Destination, see Fig. 3) for displaying the transmission characteristics for the QoS information collected over the network because a smaller size device is easier to carry than a PC.

Schuster and Brueckheimer do not explicitly show transmission characteristics of test packets transmitted across a network to which the handset is attached while a telecommunication session including a handset is in progress.

However, Scott discloses a carrier exchange network, which comprises a gateway server acting as the originating gateway for routing VoIP calls placed by subscribers to the terminating gateway. Scott further discloses the gateway server comprises an carrier exchange CX agent (note that CX agent is a software component executing on a PC workstation) to enable real-time measurements of quality of service QoS by collecting quality data when an actual VoIP call is being originated or terminated using actual packets. This teaches that the actual VoIP packets,

which corresponds to the test packets, are transmitted across the network while an VoIP call involving the originating gateway server (transmitting test packets across the network while a telecommunication session including said telecommunication device is in progress, see col. 7, lines 22-45 and col. 8, lines 1-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the QoS measuring method of Schuster with the teaching of Scott in utilizing the actual VoIP call packets as the test packets to be collected at the CX agent of the originating gateway server such that actual VoIP test packets are transmitted across the network while a VoIP call session in progress is involving the originating gateway server and collecting QoS measurements at the CX agent of this gateway server. The motivation to do so is to enable real-time measurements of quality of service QoS in a more accurate way by measuring the actual VoIP call packets as the test packets transmitted across the network.

Response to Arguments

10. Applicant's arguments filed on August 19, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. wherein said endpoint is a telecommunications device enabling an user to participate in a telecommunications session over the network; transmitting test packets across the network while a telecommunications session including said telecommunications device is in progress) due to the Applicant's amendment now necessitated a new ground of rejection.

Particularly, Scott discloses a carrier exchange network, which comprises a gateway server acting as the originating gateway for routing VoIP calls placed by subscribers to the terminating gateway. Scott further discloses the gateway server (telecommunications device) comprises an carrier exchange CX agent (note that CX agent is a software component executing on a PC workstation) to enable real-time measurements of quality of service QoS by collecting quality data when an actual VoIP call is being originated or terminated using actual packets (telecommunications device enabling an user to participate in a telecommunications session over the network). This teaches that the actual VoIP packets, which corresponds to the test packets, are transmitted across the network while an VoIP call involves the originating gateway server (transmitting test packets across the network while a telecommunication session including said telecommunication device is in progress, see col. 7, lines 22-45 and col. 8, lines 1-54). Therefore, claims 1 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al. in view of Scott et al.

As a result, the disclosure of Scott teaches the originating gateway server with CX agent embedded enables an user to participate in a telecommunications session (live VoIP call placed by an user is routed to the originating gateway server), where measurements (QoS measurements) are made as part of a specific session (live VoIP call session) involving a given device (originating gateway server with CX agent) and provides an user engaged in a session (VoIP call session) from a device (originating gateway server with CX agent) with an indication, at the user's device (originating gateway server), of the network characteristics (QoS measurements) as they relate to that particular session (the VoIP call session) and device (actual VoIP packets are collected by the CX agent of the originating gateway server to perform real-

time QoS measurements against the QoS service level agreements specified). Claims 12-13, 37, which depend from claims 1 and 34, respectively, stand rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster et al. in view of Scott et al., and in further view of Brueckheimer et al.

Allowable Subject Matter

11. Claim 54 is allowed.

12. Claims 14-26, 32, 38-39, 40-43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In claim 14, a method according to claim 11, wherein the calculated value of Ta is used to calculate impairment factor.

In claim 32, a method according to claim 30, wherein the step of logging also includes logging the fact that a communications connection over the network has been lost.

In claim 38, a method according to claim 14, wherein the delay impairment factor (Idd) is given by the formulae:

(i) for Ta < 100ms,

Idd = 0; and

(ii) for Ta => 100 ms,

$Idd = 25* ((1+X^6)^{1/6} - 3* (1+ (X/3)^6)^{1/6} + 2)$

Where X = (log(Ta/100))/log(2)

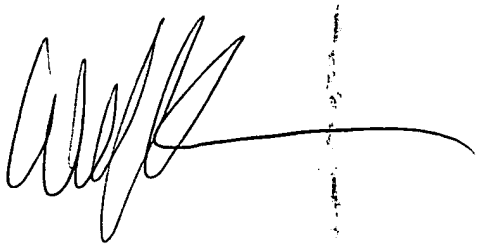
In claim 54, a method of monitoring quality of service in communications over a packet-based network between two points, at least one of which is an endpoint, comprising the steps of:

calculating from said measured difference the absolute delay in echo-free connections (Ta) between the source and destination locations over the network and thereby calculating a delay impairment factor.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



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